

## 2012 Student Leadership Awards Application Form

Please complete all fields and e-mail this form to [undergrad@acs.org](mailto:undergrad@acs.org) (include "2012 Leadership Awards" in the subject line) or FAX to 202-872-8068. All paid student members who have completed at least one year of undergraduate studies in the chemical sciences and have held elective office in an active student chapter are eligible to apply. Preference will be given to sophomores and juniors.

**All applications must be received by October 26, 2011**

1. Full Name:	Kent J. Griffith
2. Email Address:	kejgriff@indiana.edu
3. SSN:	312-08-6154
4. Mailing Address:	319 N Fess Apt. 2 Bloomington, IN 47408
5. Telephone:	765-465-2551
6. Fax:	
7. Institution name:	Indiana University, Bloomington
8. Faculty Advisor /email	Dr. Dennis G. Peters, <a href="mailto:peters@indiana.edu">peters@indiana.edu</a> Dr. Cathrine Reck, <a href="mailto:creck@indiana.edu">creck@indiana.edu</a>
9. ACS Student Member Number:	30115800
10. Expected Graduation Date:	May 2013

\_\_\_\_\_  
Applicant Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Faculty Advisor Signature

\_\_\_\_\_  
Date

## **Kent Griffith**

319 N Fess Avenue, Apt. 2 • Bloomington, IN 47408  
kejgriff@indiana.edu • 765.465.2551 (C)

American Chemical Society  
Attn: Nancy Bakowski  
1155 Sixteenth Street, NW  
Washington, DC 20036

Ms. Bakowski,

Attending the ACS Leadership Institute would be an extraordinary developmental experience and a catalyst for my current activities with the Indiana University undergraduate chapter of the American Chemical Society as well as my involvement with the organization throughout my life.

Over the course of my high school and collegiate career, I have held many leadership roles. My roles, like my interests, cover a breadth of subjects. In high school, I was the president of clubs ranging from Spanish club to a Business Professionals of America. Along the same lines, I also held offices in agriculture organizations, National Honor Society, and of course, science clubs. As I transitioned to college, my involvement has become more focused but still includes a variety of fields. During my first year, I joined several student government organizations to familiarize myself with the university and get more involved on campus. These positions included treasurer of my dormitory community, environmental director of my dormitory, and treasurer of the campus-wide Hutton Honors College Association.

In the spring of that year, the idea to start a student affiliates chapter of the American Chemical Society (SAACS) arose because Indiana University had a chapter in the past and it did not make sense to me that a large research institution with a large chemistry department should lack an active undergraduate ACS membership. It then became, and continues to be, my goal to make SAACS a vital and vibrant part of Indiana University within the scientific and campus community. With the help of several faculty members, a few other students and I were able to recruit the eleven founding members (six required) to start a university chapter. It was then that I worked with a pre-law colleague to draft the by-laws of the organization to be submitted with the other required paperwork in order to reinstate SAACS as a student organization to the university and an active chapter to the national American Chemical Society. Since the founding of the chapter in spring 2010, the chapter and I have been very busy. As president, it has been important to start lasting traditions and activities that will allow our chapter to thrive not only in the present but also into the future, long after my time as an undergraduate at Indiana University.

In addition to my primary leadership role with the ACS, I also serve as an undergraduate representative on the academic fairness committee for the IU College of Arts and Sciences and as an officer for the geology club. The academic fairness committee is comprised of faculty and students and meets periodically throughout the year to make determinations regarding academic misconduct and final grade disputes.

A diverse set of leadership roles has proven challenging but every new situation causes me to develop and refine skills in communication, teamwork, and management. Starting an organization comes with many unforeseen challenges, as I have discovered. While developing the SAACS chapter,

I have obtained significant practice and some skill at coming up with creative activities that will be academically beneficial for all members, interesting enough to encourage participation, and repeatable, if possible, so that future years will have some establishment and foundation in place. Additionally, I have gained communication and interpersonal skills from working with an array of individuals and groups such as the national ACS, Southern Indiana Section ACS officers, the student activities office, faculty advisors, undergraduates, and many others.

Three main skills that I believe have been instrumental in the founding of the organization and that are continually refined are passion, organization, and leading by example. First, it is my sincere hope that my passion for the organization is obvious throughout this letter and to everyone I interact with at Indiana University and at all SAACS functions. Secondly, to organize the approximately 70 members of SAACS, I created a database with the contact information, major, ACS number, and membership status of each individual. Finally, it might be understood that I actively participate in all SAACS events but I want to state explicitly that I strongly believe in leading by example and the idea that the more I participate, the more I can reach out to others and encourage involvement. My other leadership roles, outside of the ACS, have helped foster many of the same leadership skills. It is the balancing of these multiple roles that has helped me develop more overall balance in my life.

Attending the ACS Leadership Institute is so meaningful to me because I believe formal training would have a substantial and holistic impact on my current leadership skills. Specifically, I would like to develop the ability to make a larger impact as a leader. This objective includes reaching out to more people and expanding the membership and scope of the organizations I am involved with now, as well as those I become involved with in the future.

In order to realize that goal, I would like to develop the ability to more effectively delegate. Many of the initial tasks of founding our ACS student chapter were more efficient and appropriate to complete personally but now that the paperwork is done, it has become apparent that no matter how many hours I dedicate, there is a limit to the amount I can accomplish individually. With delegated responsibilities that may lead to new collaborations, I do not see a boundary to the potential of SAACS at Indiana University.

The growing demand for scientists is well known and the academic and financial benefits of increased societal interest in chemistry should not be underestimated. One of the main ways in which I would like to use delegation skills to strengthen SAACS is by enhancing our relatively new outreach program. The goal is to send students to grade schools and high schools locally and across the state to generate interest in the field of chemistry and provide knowledge about the career opportunities it holds. While still in the early stages of implementation, this idea has proven feasible but it depends heavily on synergetic involvement between SAACS officers, members, and their respective hometown schools. We have a human resource here at Indiana University in both sheer numbers and geographical diversity that I aspire to organize into an efficient center for distribution and promotion of chemistry.

Extremely efficient communication is necessary in order for SAACS to grow and I would also like to improve my ability in this area. As the organization expands, it will become increasingly important to ensure that all members become aware of chapter activities in a time-efficient manner so that we, as an organization, can adapt quickly to the inevitable obstacles that arise during event planning and execution. In summary, I have passion and ideas relevant to leadership and the American Chemical Society so I believe the ACS Leadership Institute would be the perfect opportunity for me to augment my current skill set and become a more effective leader within my university and community.

# Kent Griffith

319 N Fess Avenue, Apt. 2 • Bloomington, IN 47408

kejgriff@indiana.edu • 765.465.2551 (C)

## Education

### **Indiana University, College of Arts and Sciences**

Bachelor of Science with honors, Chemistry

Bachelor of Science, Geological Sciences

GPA: 4.0/4.0

### **Bloomington, IN**

Certificate, Liberal Arts and Management Program

Minor, Mathematics

Anticipated Graduation Date, May 2013

## Academic Awards and Accomplishments

Barry M. Goldwater Scholar (2011 Class)

Founders Scholar (Fr., So.)

Dean's List-Fall 2009, Spring 2010, Fall 2010, Spring 2011

National Society of Collegiate Scholars

Hutton Honors College Balfour Scholarship

Herbert Presidential Scholar

IU Excellence Scholar

Lilly Scholar

Valedictorian Scholarship

Science, Technology, and Research Scholar

### Chemistry Departmental Awards

Francis Mildred Whitacre Scholarship (Fr.)

Grim Scholarship (So.)

Chemistry Honor Roll (Fr., So.)

Ira E. Lee Summer Research Scholarship (Fr.)

### Geological Sciences Departmental Awards

Professional Development Award (So.)

Mineralogical Society of America Undergraduate Award (So.)

John B. Patton Research Grant Award (So.)

Freshman Excellence Award (Fr.)

### Publication

Foley, Matthew P.; Du, Peng; **Griffith, Kent J.**; Karty, Jonathan A.; Mubarak, Mohammad S.; Raghavachari, Krishnan; Peters, Dennis G. Electrochemistry of substituted salen complexes of nickel(II): Nickel(I)-catalyzed reduction of alkyl and acetylenic halides. *Journal of Electroanalytical Chemistry* **2010**, 647(2), 194-203.

## Professional Experience

### e-biofuels, LLC

Intern

Middletown, Indiana

Summer 2008, Summer 2009

- Analyzed vegetable oil and biodiesel samples for quality assurance in an on-site laboratory
- Saved the company an estimated \$500/week in the laboratory through efficiency improvements
- Researched novel synthesis methods to improve processing efficiency
- Implemented a company-wide recycling program during my first month of employment

### Dr. Dennis G. Peters, Herman T. Briscoe Professor of Chemistry

Undergraduate Researcher, Analytical Electrochemistry

Bloomington, Indiana

August 2009-Current

- Designed a flow-through chemical reactor to increase efficiency and capacity of electrolytic syntheses
- Experimented within the fields of organic, analytical, environmental, and electroorganic chemistry
- Developed laboratory skills in GC, GC-MS, cyclic voltammetry, and controlled-potential electrolysis

### Professional Organizations

American Chemical Society (Fr., So., Ju.)

American Geophysical Union (Ju.)

Mineralogical Society of America (So., Ju.)

Undergraduate Chapter Founder and President

Undergraduate Member

Undergraduate Member

### Presentations

Science, Technology, and Research Scholars Symposia (Poster)

March 6, 2010, March 5, 2011

Hutton Honors College Research Symposium (Poster)

April 10, 2010

Central Region Meeting of the American Chemical Society (Poster)

June 8, 2011

Turkey Run Analytical Chemistry Conference (Poster)

September 30, 2011

Student Affiliates of the American Chemical Society Chapter Meeting (Oral)

October 13, 2010

## Specific Leadership Experiences

### Student Affiliates of the American Chemical Society

- Founded the chapter in the spring of freshman year by recruiting eleven “founding members”. The idea to start a chapter arose when I became aware undergraduate chapters exist but Indiana University did not currently have one.
- Through heavy recruitment efforts, officially registered and paid ACS student membership grew to over 50 members in my first full year as president.
- Personally, I planned and executed many events in the first year of my presidency, which are now recurring again into the second year of my presidency, along with new activities this year.
  - Examples:
    - Bowling Night for the Chemistry Department (undergraduate students, graduate students, and faculty)
    - Volunteering in cooperation with other Indiana ACS members to organize an event at the Indianapolis Children’s Museum for National Chemistry Week
    - Organizing participation in “Celebrate Science Indiana”
    - Campus-wide food drive during the month of October in honor of National Chemistry Week; over 600 lbs of food donated to Hoosier Hills Food Bank thus far.
- Honorable Mention Chapter Award for its 2010-2011 activities as reported in "Indiana University (Bloomington) Student Affiliates of the American Chemical Society 2010-2011"
- Now into the third year, membership totals over 70 undergraduates, including paid ACS members and local chapter members.

### Other Leadership Roles

- Mentor to younger undergraduates in my research laboratory
- Academic Fairness Committee, College of Arts and Sciences
- Treasurer of the Hutton Honors College Association freshman year
- Treasurer of my dormitory community freshman year
- Environmental director of my dormitory (~1000 students) freshman year
- Treasurer of the Geology Club for two years

October 25, 2011

Nancy Bakowski  
American Chemical Society  
Student Affiliates

Dear Ms. Bakowski:

I write on behalf of **Kent J. Griffith**, who has entered his name for recognition by the American Chemical Society in connection with his involvement as a leader of our Indiana University chapter of ACS Student Affiliates. For the past year, Kent has served as president of our local group and he has been instrumental in bringing the group back to life after many years of total obscurity. Through the action of Kent and a few other enterprising students, our local group has become very active in recruiting a large number of student members and in sponsoring activities that brought recent recognition in the form of honorable mention from the ACS. For these reasons and on the basis of information I provide below, I enthusiastically endorse Kent.

I have known Kent since we “interviewed” each other in March of 2009, as part of the application and selection process for the IU STARS (Indiana University Science, Technology, and Research Scholars) Program. This program is designed to provide immediate research opportunities for incoming freshmen at Indiana University. During our “interview,” we immediately made a strong connection, and Kent joined my research group as a matriculating freshman in the fall of 2009.

From the start of our association, it has been obvious that Kent is a very special young man. He is pursuing B.S. degrees in both chemistry and geology, along with a certificate program (the Liberal Arts and Management Program, LAMP) in our Kelley School of Business. So far, through his freshman and sophomore years (2009–2011) as well as the summers of 2010 and 2011, Kent has achieved a perfect grade-point-average of 4.000, and his transcript reveals that he has actually earned 52 credits of A+ grades in coursework (out of a total, so far, of 78 credits); however, those A+ grades do not figure into the grade calculation.

During the spring semester of 2010, Kent joined with approximately 10–12 other chemistry and biochemistry undergraduates (mostly freshmen) to resurrect our long-moribund local chapter of Student Affiliates of the American Chemical Society—our chapter has Dr. Cathrine Reck and me as co-advisers. Not surprisingly, given the respect

and admiration that Kent enjoys among his peers, he was unanimously elected to be President of the chapter for the 2010-2011 academic year, and he has continued to play a crucial and active role during the current academic year. Without Kent's enthusiasm, leadership, and drive, it is most unlikely that our Student Affiliates chapter would so quickly revitalize itself and then receive recognition in the form of Honorable Mention from the American Chemical Society.

Early in 2011, I wrote a letter in strong support of Kent for the Barry M. Goldwater national scholarship competition. In the spring of 2011, we received word that Kent was chosen to receive a prestigious Goldwater scholarship—one of two recipients from Indiana University and one of seven from the state of Indiana. In hindsight, this outcome was not surprising, yet a strong testimony to how truly exceptional Kent is.

Beyond the preceding academic and extracurricular achievements, it is in the arena of independent undergraduate research that Kent has truly shined and distinguished himself. Upon joining my group as a freshman a little more than two years ago, Kent chose to work on a new project that involves the design, testing, and implementation of a flow-through electrochemical reactor that can be used to synthesize new compounds by electrochemical means. Kent has made excellent progress and we are close to the moment when the reactor will be tested with a real chemical system. Along the way, I afforded Kent the opportunity to be involved in some key and final projects to complete a different study that had been initiated by one of my former doctoral students. Kent jumped right into the middle of these experiments and completed a portion of the necessary work. To acknowledge his contributions, I made him the third coauthor of a paper that was published in the *Journal of Electroanalytical Chemistry* [Foley, M. P.; Du, P.; **Griffith, K. J.**; Karty, J. A.; Mubarak, M. S.; Raghavachari, K.; Peters, D. G., "Electrochemistry of Substituted Salen Complexes of Nickel(II): Nickel(I)-catalyzed Reduction of Alkyl and Acetylenic Halides," *J. Electroanal. Chem.* **2010**, *647*, 194–203]—**quite an accomplishment for a then freshman**. It is obvious that he thinks deeply and critically about the science he is doing and studying; indeed, I believe these are skills that he acquired a long time ago and that he continues to expand and refine on a daily basis. In the next couple of weeks, he and I will be preparing an abstract for an oral presentation that Kent plans to make at the international meeting of The Electrochemical Society to be held in Seattle, Washington, during the first week of May, 2012.

Finally, on the personal side, Kent is highly articulate, very hardworking, thoroughly mature, and ever so likable. It is too early to know the area of science that will eventually become his life's work, but it is not too early to predict that he has the qualities to make a significant impact in that discipline.

Over the past 49+ years that I have been a faculty member at Indiana University, I have had 56 undergraduates carry out research in my laboratory. Among that group of highly talented students, ***I would rank Kent among the top three or four in all that time.*** He is one of those rare individuals who comes along just once or twice each decade and who is an amazing role model for his peers. Accordingly, I am convinced that Kent merits recognition from the American Chemical Society.

Sincerely,

Dennis G. Peters  
Briscoe Professor of Chemistry

Department of Chemistry  
Indiana University  
Bloomington, Indiana 47405  
Telephone: (812) 855-9671  
Fax: (812) 855-8300  
Email: [peters@indiana.edu](mailto:peters@indiana.edu)